WD AV-GP

Power-saving Hard Drives

WD AV-GP SATA hard drives store more hi-def audio and video than ever before – up to 3 TB. They are optimized with SilkStream™ technology to capture data from up to 12 simultaneous HD video streams. And with 24x7 operation, low temperature, and best-in-class reliability, WD AV-GP hard drives are ideal for DVR/PVR and video surveillance applications. 3-year limited warranty.

INTERFACE
SATA 3 Gb/s

WIDTH/HEIGHT
3.5-inch/1-inch

ROTATIONAL SPEED
IntelliPower™

CAPACITIES
160 GB to 3 TB

MODEL NUMBERS

WD30EURS	WD15EURS	WD10EVVS	WD5000AVCS
WD25EURS	WD15EVDS	WD7500AURS	WD3200AVVS
WD20EURS	WD10EURS	WD7500AVDS	WD2500AVVS
WD20EVDS	WD10EVDS	WD5000AVDS	WD1600AVVS

Note: Not all products may be available in all regions of the world.

Product Features

Highest capacity for audio/video storage

WD AV-GP SATA drives now offer unrivaled storage capacity up to 3 TB – perfect for today's storage intensive applications.

24x7 reliability

These drives are designed to last in high temperature always-on streaming digital audio/video environments such as PVR/DVR, IPTV, and video surveillance systems.

Compatible

Tested for compatibility in a broad range of AV products including set top boxes, DVR/PVR, and mainstream video surveillance systems. For drives with greater than 2.19 TB capacity, compatibility is selective to PVRs and surveillance systems that are compatible with hard drives exceeding 2.19 TB. For more information on large capacity drive compatibility, go to *http://avlargecapacitydrives.com*.

Reduced power consumption

WD AV-GP drives consume less power by up to 40 percent compared to 7200 RPM hard drives. Lower power means less heat and greater reliability.

Quiet

Noise levels have been minimized to less than one sone* - virtually below the threshold of human hearing.

SilkStream™

Optimized for smooth, continuous digital video playback of up to twelve simultaneous HD streams. SilkStream is compatible with the ATA streaming command set so CE customers can use standard streaming management and error recovery options.

IntelliSeek™

Calculates optimum seek speeds to lower power consumption, noise, and vibration.

IntelliPower

A fine-tuned balance of spin speed, transfer rate, and caching algorithms designed to deliver both significant power savings and solid performance.

IntelliPark™

Parks the recording heads off the disk surface during spin up, spin down, and when the drive is off. This ensures the recording head never touches the disk surface resulting in improved long term reliability due to less head wear, and improved non-operational shock tolerance.

Preemptive Wear Leveling (PWL)

The drive arm frequently sweeps across the disk to reduce uneven wear on the drive surface common to audio video streaming applications.

Advanced Format (AF)

Technology being adopted by WD and other drive manufacturers as one of multiple ways to continue growing hard drive capacities. AF is a more efficient media format that enables increased areal densities. (EURS/AURS models only)

1 million hours MTBF

Best-in-class reliability for mainstream 3.5-inch form-factor AV storage.**

* A sone is a subjective unit of loudness as perceived by a person with normal hearing.

** Based upon dual tuner system operating in typical 30°C air ambient environment.

WD GreenPower™ TECHNOLOGY

PUT YOUR LIFE ON IT®

WD AV-GP

Specifications[1]	3 TB	2.5 TB	2 TB	2 TB	1.5 TB	1.5 TB	1 TB	1 TB
Model numbers	WD30EURS	WD25EURS	WD20EURS	WD20EVDS	WD15EURS	WD15EVDS	WD10EURS	WD10EVDS WD10EVVS
Formatted capacity	3,000,592 MB	2,500,495 MB	2,000,398 MB	2,000,398 MB	1,500,301 MB	1,500,301 MB	1,000,204 MB	1,000,204 MB
User sectors per drive	5,860,533,168	4,883,781,168	3,907,029,168	3,907,029,168	2,930,277,168	2,930,277,168	1,953,525,168	1,953,525,168
Advanced Format (AF)	Yes	Yes	Yes	No	Yes	No	Yes	No
Native command queuing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SATA latching connector	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
Performance								
Data transfer rate (max) Buffer to host (SATA) Host to/from drive (sustained)	 3 Gb/s 145 MB/s	 3 Gb/s 145 MB/s	 3 Gb/s 130 MB/s	 3 Gb/s 110 MB/s	 3 Gb/s 130 MB/s	 3 Gb/s 110 MB/s	 3 Gb/s 110 MB/s	 3 Gb/s 111 MB/s
Cache (MB)	64	64	64	32	64	32	64	32 (WD10EVDS) 8 (WD10EVVS)
Rotational speed (RPM)	IntelliPower	IntelliPower	IntelliPower	IntelliPower	IntelliPower	IntelliPower	IntelliPower	IntelliPower
Average drive ready time (sec)	17	17	14.5	14.5	14.5	14.5	14.3	14.3
Reliability/Data Integrity								
Load/unload cycles[2]	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Non-recoverable read errors per bits read	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}
Limited warranty (years)[3]	3	3	3	3	3	3	3	3
Power Management								
12VDC (A, max)	1.775	1.775	1.725	1.603	1.725	1.603	1.464	1.671
Average power requirements (W) Read/Write Idle Standby Sleep	 6 5.5 0.75 0.75	 6 5.5 0.75 0.75	 5.3 4.8 0.9 0.9	 5.9 4.9 0.7 0.7	 5.3 4.8 0.9 0.9	 5.9 4.9 0.7 0.7	 4.9 4.2 0.4 0.4	 4.9 4.2 0.4 0.4
Environmental Specifications[4]								
Temperature (°C) Base casting (max) Operating Non-operating	 70 0 to 60 -40 to 70	 70 0 to 60 -40 to 70	 70 0 to 60 -40 to 70	 70 0 to 60 -40 to 70	 70 0 to 60 -40 to 70	 70 0 to 60 -40 to 70	 70 0 to 60 -40 to 70	 70 0 to 60 -40 to 70
Shock (Gs) Operating (2 ms, read/write) Operating (2 ms, read) Non-operating (2 ms)	 30 65 250	 30 65 250	 30 65 250	 30 65 250	 30 65 250	 30 65 250	 30 65 300	 30 65 300
Average acoustics (dBA)[5] Idle mode Quiet seek mode	 24 25	 24 25	 24 25	 25 26	 24 25	 25 26	 23 24	 24 25
Physical Dimensions								
Height (in./mm, max)	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1
Length (in./mm, max)	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147
Width (in./mm, ± .01 in.)	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6
Weight (lb./kg, ± 10%)	1.61/0.73	1.61/0.73	1.40/0.64	1.61/0.73	1.40/0.64	1.61/0.73	1.32/0.60	1.32/0.60

[1] As used for storage capacity, one megabyte (MB) = one million bytes, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment. As used for buffer or cache, one megabyte (MB) = 1,048,576 bytes. As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, and gigabit per second (Gb/s) = one billion bits per second. Effective maximum SATA 3 Gb/s transfer rate calculated according to the Serial ATA specification published by the SATA-IO organization as of the date of this specification sheet. Visit www.sata-io.org for details.

[2] Controlled unload at ambient condition.

[3] The term of the limited warranty may vary by region. Visit http://support.wdc.com/warranty for details.

[4] No non-recoverable errors during operating tests or after non-operating tests.

[5] Sound power level.

WD AV-GP

Specifications[1]	750 GB	750 GB	500 GB	320 GB	250 GB	160 GB
Model numbers	WD7500AVDS	WD7500AURS	WD5000AVDS WD5000AVCS	WD3200AVVS	WD2500AVVS	WD1600AVVS
Formatted capacity	750,156 MB	750,156 MB	500,107 MB	320,072 MB	251,059 MB	160,041 MB
User sectors per drive	1,465,149,168	1,465,149,168	976,773,168	625,142,448	490,350,672	312,581,808
Advanced Format (AF)	No	Yes	No	No	No	No
Native command queuing	Yes	Yes	Yes	Yes	Yes	Yes
SATA latching connector	Yes	Yes	Yes	Yes	Yes	Yes
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
Performance						
Data transfer rate (max) Buffer to host (SATA) Host to/from drive (sustained)	 3 Gb/s 110 MB/s	 3 Gb/s 110 MB/s	 3 Gb/s 110 MB/s	 3 Gb/s 80 MB/s	 3 Gb/s 80 MB/s	 3 Gb/s 80 MB/s
Cache (MB)	32	64	32 (WD5000AVDS) 16 (WD5000AVCS)	8	8	8
Rotational speed (RPM)	IntelliPower	IntelliPower	IntelliPower	IntelliPower	IntelliPower	IntelliPower
Average drive ready time (sec)	14.3	14.3	14.3	8	8	8
Reliability/Data Integrity						
Load/unload cycles[2]	300,000	300,000	300,000	300,000	300,000	300,000
Non-recoverable read errors per bits read	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}
Limited warranty (years)[3]	3	3	3	3	3	3
Power Management						
12VDC (A, max)	1.671	1.464	1.392	1.350	1.350	1.350
Average power requirements (W) Read/Write Idle Standby Sleep	 4.9 4.2 0.4 0.4	 4.9 4.2 0.4 0.4	 4.1 3.7 0.8 0.8	 4.7 2.3 0.8 0.8	 4.7 2.3 0.8 0.8	 4.7 2.3 0.8 0.8
Environmental Specifications[4]						
Temperature (°C) Base casting (max) Operating Non-operating	 70 0 to 60 -40 to 70	 70 0 to 60 -40 to 70	 70 0 to 60 -40 to 70	 70 0 to 60 -40 to 70	 70 0 to 60 -40 to 70	 70 0 to 60 -40 to 70
Shock (Gs) Operating (2 ms, read/write) Operating (2 ms, read) Non-operating (2 ms)	 30 65 300	 30 65 300	 30 65 350	 30 65 350	 30 65 350	 30 65 350
Average acoustics (dBA)[5] Idle mode Quiet seek mode	 24 25	 23 24	 21 22	 22 22	 22 22	 22 22
Physical Dimensions						
Height (in./mm, max)	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1
Length (in./mm, max)	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147
Width (in./mm, ± .01 in.)	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6
Weight (lb./kg, ± 10%)	1.32/0.60	1.32/0.60	0.97/0.44	0.99/0.45	0.99/0.45	0.99/0.45

[1] As used for storage capacity, one megabyte (MB) = one million bytes, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment. As used for buffer or cache, one megabyte (MB) = 1,048,576 bytes. As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, and gigabit per second (Gb/s) = one billion bits per second. Effective maximum SATA 3 Gb/s transfer rate calculated according to the Serial ATA specification published by the SATA-IO organization as of the date of this specification sheet. Visit www.sata-io.org for details.

[2] Controlled unload at ambient condition.

[3] The term of the limited warranty may vary by region. Visit http://support.wdc.com/warranty for details.

[4] No non-recoverable errors during operating tests or after non-operating tests.

[5] Sound power level.

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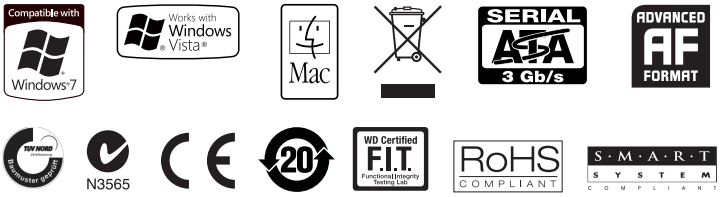

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